

THE MIND'S EYE: A REVIEW OF THE PRESS

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For those who were too feeble the day after Christmas to lift the Sunday paper off the coffee table, herewith a summary of the principles of the new science of Systemantics drawn from "Why Nothing Works the Way It's Supposed To," by John Gall (New York Times Magazine, 26 December 1976). The article is itself abstracted by the author from his forthcoming book Systemantics. Dr. Gall is, aptly enough, a pediatrician. He hit upon his theory when, after long observation of organizational ineptitude and systems malfunction, it began to dawn on him that men do not yet understand the basic laws governing the behavior of complex systems. Systemantics is designed to supplement the splendid research into human frailty which produced Parkinson's Law and the Peter Principle.

Gall first notes a universal problem experienced by all humans in all times: THINGS AREN'T WORKING VERY WELL. True today, this was true as well in the Dark Ages, the Middle Ages, the Industrial Revolution, and the Victorian Era. The condition leads to a general statement, Gall's Primal Scenario:

THINGS (THINGS GENERALLY/ALL THINGS/THE WHOLE WORKS) ARE INDEED NOT WORKING VERY WELL. IN FACT, THEY NEVER DID.

This loose language is formally tightened into the basic axiom of Systemantics:

SYSTEMS IN GENERAL WORK POORLY OR NOT AT ALL.

Which Gall himself recognizes as a reformulation of Murphy's Law: If Anything Can Go Wrong, It Will. He gives as examples the world-wide insecticide bite-back, the failure of the Aswan Dam, the propensity of undeveloped countries to use their means to buy weapons instead of food, and President-Elect Carter's problem with his heating bill when he was Governor of Georgia.

A neighbor of Gall's, although untutored in shipbuilding, built a boat in his back yard. Stunned by this achievement, Gall went to a shipyard to see what real shipbuilders do. There he found welders, carpenters, engineers, contract writers, budget planners; and assorted administrators, but he looked in vain for a shipbuilder. He concluded:

PEOPLE IN SYSTEMS DO NOT DO WHAT THE SYSTEM SAYS THEY ARE DOING.

So also, the corollary:

THE SYSTEM ITSELF DOES NOT DO WHAT IT SAYS IT IS DOING.

The prime example of this is Detroit, which we tenaciously think is meeting our need for a cheap, easy, convenient, safe, and fast means of getting from one place to another.

It is plain that there is a potentially dangerous mix-up here between reality and illusion. By great good fortune, a law is found to operate which prevents disorientation of systems people, the Fundamental Law of Administrative Workings (FLAW):

THINGS ARE WHAT THEY ARE REPORTED TO BE, or,

THE REAL WORLD IS WHAT IS REPORTED TO THE SYSTEM. IF IT ISN'T OFFICIAL, IT HASN'T HAPPENED.

This law effectively governs systems to insure that the people enclosed therein do not have their attention deflected by reality. In his hospital experience Dr. Gall was impressed by the growing distance between hospital personnel and patients, characterized by a penchant to relate rather more securely to Social Security numbers, driver's licenses, and other paper phantoms. Hoping that something was being done about this regressive tendency, he discovered that the personnel were in the hospital auditorium taking a course in interdisciplinary function. Interdisciplinary function, he says, is defined as the art of correlating one's own professional activities more and more with those of other professionals while actually doing less and less.

Statements of Goals and Objectives are an overwhelming need of systems. Gall describes this process at some length in order to demonstrate the immobilization of Lionel Trillium, a young and enthusiastic assistant professor of botany who is brutalized by the blind operational force expressed as:

THE SYSTEM ALWAYS KICKS BACK.

Required by his department chairman to produce detailed statements of what he is doing, Trillium--who got into botany because of unsatiated but sublimated curiosity about sex--is finished as a creative instructor; he has become administratively encircled. Henceforth his conduct will be governed by the Functional Indeterminacy Theorem (FIT):

IN COMPLEX SYSTEMS, MALFUNCTION AND EVEN TOTAL NONFUNCTION MAY NOT BE DETECTABLE FOR LONG PERIODS, IF EVER.

Evidence adduced here includes the reigns of Henry VIII, George III, the Czars of Russia, the Sultans of Turkey, and the performances of some present-day heads of state. Naturally, FIT's companion principle is: ANY LARGE SYSTEM IS GOING TO BE OPERATING MOST OF THE TIME IN FAILURE MODE. This is restated in the Fundamental Failure Theorem (FFT):

A SYSTEM CAN FAIL IN AN INFINITE NUMBER OF WAYS.

Dr. Gall closes with a cautious note of comfort: Some complex systems actually function. Not an axiom, this is merely a non-guaranteed, natural phenomenon which is accepted with humble thanks. But it leads to the final law of System-antics:

IF A SYSTEM IS WORKING, LEAVE IT ALONE.

The Mind's Eye will appear monthly with summaries of noteworthy articles of general interest in the current periodical press. Contributions are invited. CAM.